UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,192	12/12/2001	Uri Wilensky	STR02000	4239

33438 7590 08/13/2009

HAMILTON & TERRILE, LLP
P.O. BOX 203518
AUSTIN, TX 78720

EXAMINER	
SILVER, DAVID	
ART UNIT	**PAPER NUMBER**
2128	

NOTIFICATION DATE	DELIVERY MODE
08/13/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

tmunoz@hamiltonterrile.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte URI WILENSKY and WALTER M. STROUP

Appeal 2009-000032
Application 10/016,192[1]
Technology Center 2100

Decided: August 11, 2009

Before LEE E. BARRETT, HOWARD B. BLANKENSHIP, and CAROLYN D. THOMAS, *Administrative Patent Judges.*

C. THOMAS, *Administrative Patent Judge.*

DECISION ON APPEAL

---

[1] Application filed December 12, 2001. The real parties in interest are the named inventors Uri Wilensky and Walter Stroup.

I. STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from a final rejection of claims 1-14 mailed May 10, 2006, which are all the claims remaining in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

A. INVENTION

Appellants invented a system and method for providing interactive agents that interact with a central computer and with one another through an object based parallel modeling language and/or an aggregate modeling language using an open client-server architecture. (Spec. 33, Abstract.)

B. ILLUSTRATIVE CLAIM

The appeal contains claims 1-14. Claims 1 and 8 are independent claims. Claim 1 is illustrative:

> 1. A modeling device for simulation of complex dynamic systems, comprising:
>
> a plurality of remote agents, each remote agent comprising:
>
> logic to receive input data;
>
> object control node information corresponding to performance of the remote agent and a relationship of the remote agent to the simulation;
>
> control instructions to convert the input data into the control node information; and
>
> logic to transmit the object control node information and the control instructions to a server computing device; and
>
> the server computing device, comprising:

> an object-based parallel modeling language component that collects object control node information and control instructions corresponding to each of the remote agents of the plurality of remote agents and coordinates the interaction of the remote agents based upon the collected object control node information and control instructions; and
>
> logic to transmit interactive simulation information based upon the interaction of the remote agents to the plurality of remote agents.

C. REFERENCE

The sole reference relied upon by the Examiner as evidence in rejecting the claims on appeal is:

Ulrich	5,466,200	Nov. 14, 1995

D. REJECTION

The Examiner entered the following rejection which is before us for review:

Claims 1-14 are rejected under 35 U.S.C. § 102(b) as being anticipated by Ulrich.

II. FINDINGS OF FACT

The following findings of fact (FF) are supported by a preponderance of the evidence.

Ulrich

1. Ulrich discloses "the hub receives the data from all of the concurrent users, processes it in real-time to resolve all collisions and conflicts, groups users in a specific region of the simulated environment into

the same group, and then broadcasts the grouped information (e.g., updated position information) over the high-bandwidth channel." (Col. 9, ll. 35-41.)

2. Ulrich discloses that "[w]hen the computer [in the exercise apparatus] is in a downloading mode 136, it is . . . (ii) receiving a simulation environment database from other computers or from the hub." (Col. 10, ll. 60-64.)

3. Ulrich discloses that "[a]n interactive simulated environment is generated by a processor 18, such as a computer, and displayed on a display system 20. This display system comprises a viewing screen or multiple viewing screens." (Col. 4, ll. 9-12.)

III. PRINCIPLES OF LAW

In rejecting claims under 35 U.S.C. § 102, "[a] single prior art reference that discloses, either expressly or inherently, each limitation of a claim invalidates that claim by anticipation." *Perricone v. Medicis Pharmaceutical Corp.*, 432 F.3d 1368, 1375 (Fed. Cir. 2005), citing *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1565 (Fed. Cir. 1992). "Anticipation of a patent claim requires a finding that the claim at issue 'reads on' a prior art reference." *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1346 (Fed Cir. 1999) ("In other words, if granting patent protection on the disputed claim would allow the patentee to exclude the public from practicing the prior art, then that claim is anticipated, regardless of whether it also covers subject matter not in the prior art.") (internal citations omitted).

IV. ANALYSIS

The Anticipation Rejection

We now consider the Examiner's rejection of the claims under 35 U.S.C. § 102(b) as being anticipated by Ulrich.

Coordinates the Interaction Limitation

Appellants contend that "the server computing device includes a modeling language component that collects remote inputs and coordinates the interaction of the remote agents in a centralized simulation, thereby generating interactive simulation information." (App. Br. 8.) Appellants further contend that "there is simply no reference whatsoever in Ulrich to 'coordinating' the interaction of remote agents at Ulrich's hub processor 104, much less that the Ulrich's hub server coordinates the interaction of the remote agents based upon the collected object control node information and control instructions." (Reply Br. 2.) (Emphasis omitted.)

The Examiner found that "[t]he coordination of interaction of remote agents is disclosed by Ulrich on (Fig 8 and 9 and their respective descriptions). The Brief description of Fig. 8, for example, is '…a hub controls communications between two or more exercise apparatus ('nodes') by receiving information from all nodes and directing information to all of, or to a subset of all of, the nodes.'" (Ans. 8-9: section 10.4.1.)

Issue: Have Appellants shown that the Examiner erred in finding that Ulrich discloses a component that "coordinates the interaction of the remote agents based upon the collected object control node information and control instructions?"

As noted *supra*, the Examiner found the Ulrich's hub processor coordinates the interaction between the remote agents. We agree. Specifically, Ulrich discloses that the hub receives data from all of the concurrent users, processes the data to resolve collisions and conflicts, and uses the collected information to group users in a specific region of the simulated environment into the same group (FF 1). The ordinary and usual meaning of "coordinate" is "to bring into a common action, movement, or condition." *Merriam-Webster's Collegiate Dictionary,* p. 255 (10th Edition 1997). With this definition in mind, we find that Ulrich's hub processor does "coordinate" the interaction of the remote agents (e.g., exercise apparatuses). Thus, the claimed "component that collects . . . and coordinates the interaction of the remote agents based upon the collected object control information and control instructions" *reads on* Ulrich's hub processor collection of information and processing of such information so as to group the users accordingly.

Centralized Simulator Argument

Appellants contend that "Ulrich distributes the simulation functionality at each remote exercise machine, while the present invention provides a centralized simulator." (App. Br. 6.) (Emphasis omitted.) Appellants further contend that "the server computing device includes a modeling language component that collects remote inputs and coordinates the interaction of the remote agents in a centralized simulation, thereby generating interactive simulation information." (App. Br. 8.)

The Examiner found that "[c]oordinating interaction is not the same as simulating interaction . . . Specifically, coordinating troops is not equivalent

to simulating troops. Therefore, Appellants are arguing features not claimed." (Ans. 8: section 10.4.1.) The Examiner further found that "Applicants have not claimed a central server that performs modeling of the remote agents." (Ans. 8: section 10.3.3.)

Issue: Have Appellants shown that the Examiner erred in finding that the claimed invention, as set forth in claim 1, does not require a central server that performs modeling of the remote agents?

Claim 1 recites, *inter alia,* the server computing device, comprising: "an object-based parallel modeling language component that collects . . . and coordinates . . .; and logic to transmit interactive simulation information . . ." In other words, Claim 1 requires that the server collects, coordinates, and transmits information. Contrary to Appellants arguments, we find that Claim 1 does not require that the server provides a "centralized simulator" at the server, nor does the server "generate" simulation information. Instead, the server is merely required to transmit simulation information to the remote agents. Thus, we agree with the Examiner that Appellants' arguments are not commensurate with the actual scope of instant claim 1.

In addition, Appellants have not shown how the *data* received from all concurrent users in Ulrich and transmitted to its hub is distinguishable from the claimed object control node information and control instructions.

Further, Ulrich discloses that the hub can transmit a simulation environment database to the remote agents (FF 2). Thus, the claimed "transmit interactive simulation information . . . to the plurality of remote agents" *reads on* Ulrich's exercise apparatus receiving a simulation database from the hub.

Object-Based Parallel Modeling Language Limitation

Regarding clams 1-7, Appellants contend that "Ulrich's use of the hub processor to distribute database information does not meet the claim requirement of a server-side modeling language component for coordinating the interaction of remote agents." (App. Br. 9.) Appellants further contend that "[t]hese passages from the Applicants' specification confirm that an 'object-based modeling language' refers to a modeling language that acts on self-contained objects, each of which has its own internal state." (App. Br. 11.)

The Examiner found that "the modeling language is clearly correlated to the simulation." (Ans. 11: section 10.6.1.) The Examiner further found that "the modeling/simulation component is clearly parallel because users are able to perform the tasks in parallel (at the same time) to each other." (Ans. 12: section 10.6.1.) Also, the Examiner found that "'object-based' is a generic term and when given its broadest reasonable interpretation consistent with the specification describes that something is based on objects, such as, for example, exercise machines." (Ans. 12-13: section 10.6.3.)

Issue: Have Appellants shown that the Examiner erred in finding that Ulrich discloses "an object-based parallel modeling language component?"

As noted *supra*, the Examiner found that the broadest reasonable interpretation of an "object-based parallel modeling language component" reads on any simulation environment where users can perform tasks on objects, e.g., exercise machines, at the same time. We agree.

From our review of the original Specification, we find no express definition of this phrase in the Specification. Therefore, we give this phrase its ordinary and customary definition and find the Examiner's proffered

interpretation reasonable. For example, the ordinary and usual meaning of "modeling" is "to produce a representation or simulation of." *Merriam-Webster's Collegiate Dictionary,* p. 747 (10th Edition 1997). Given that we have already established that Ulrich discloses a simulation environment where user can perform tasks at the same time on the exercise machines, we find that Ulrich discloses an object-based parallel modeling language component.

Server includes a Display Limitation

Regarding claims 2, 5-7, and 12-14, Appellants contend that "the only displays described in Ulrich area [sic] those associated with the remote exercise apparatus. . . . In contrast, there is no suggestion or disclosure by Ulrich that the hub processor 104 includes a display." (App. Br. 12.)

The Examiner found that Ulrich discloses an encoder 150 which performs digital-to-analog conversions so analog signals can be broadcast over the cable TV channel. Thus, the central hub indeed provides a display tool in the form of a cable TV signal. Additionally, each of the displays on the exercise machines can be interpreted as an extended display of the central hub. (Ans. 14: section 10.8.1.)

Issue: Have Appellants shown that the Examiner erred in finding that Ulrich discloses display tools at the server?

We begin this analysis by noting that there are varying scopes of "display" capabilities in the claims.

Firstly, claim 2 merely requires "display tools" at the server. In this case, the Examiner found that "display tools" reads on Ulrich's hub having an encoder 150 which allows TV signals to be broadcast. We agree. Here,

the claim does not require a "display" *per se* but merely tools that allow for displaying. Thus, we find the claimed "display tools" reads on Ulrich's encoder component.

Secondly, claims 12-14 require displaying on a central control panel *coupled to* the server. In this case, a display on a central control panel needs to be merely coupled to the server, not located at the server. Here, Ulrich discloses a viewing screen (one or multiple) centrally located at exercise machines coupled to the hub (FF 3). Thus, we find the claimed "displaying . . . coupled to the server" reads on Ulrich's viewing screen located at the exercise machines control panel.

Thirdly, claims 5-7 requires a graphical display for viewing the simulation information at the server. Here, the Examiner has not identified and we do not readily find any corresponding *server side* graphical display in Ulrich. Thus, the lack of a server side display in Ulrich negates anticipation in this case.

Summary

Appellants have *not* persuaded us of error in the Examiner's conclusion of anticipation for claims 1-4 and 8-14. However, Appellants have persuaded us of error in the Examiner's conclusion of anticipation for claims 5-7.

V. CONCLUSIONS

We conclude:

(1) Appellants have not shown that the Examiner erred in rejecting claims 1-4 and 8-14; and

(2) Appellants have shown that the Examiner erred in rejecting claims 5-7.

VI. DECISION

In view of the foregoing discussion,

(1) We affirm the Examiner's § 102 rejection of claims 1-4 and 8-14 and

(2) reverse the Examiner's § 102 rejection of claims 5-7.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2009).

AFFIRMED-IN-PART

PEB

HAMILTON & TERRILE, LLP
P.O. BOX 203518
AUSTIN, TX 78720